THE FARMERS' CABINET,

DEVOTED TO AGRICULTURE, HORTICULTURE AND RURAL ECONOMY.

Vol. II.—No. 7.] Philadelphia, November 1, 1837. [Whole No. 31.

Lime.

[The Baltimore Farmer and Gardener gives the following valuable remarks on the uses of lime as a manure, in reply to questions of a correspondent. There continues to be much of ignorance as to the value of this article, though much has been written about it. It ought not to continue.]

Lime as a meliorator of the soil was used in the earlier days of the Roman Empire; its advantages were seen and acknowledged; its wonder-working powers were visible on ten thousand fields, centuries by-gone; but strange as it may seem—unnatural as is the fact—it is nevertheless true, that there are innumerable instances of highly intelligent farmers who still doubt its efficacy. That those who from the prejudice of misdirected or imperfect education, are incompetent to judge correctly, should still be sceptical, excites no surprise in our mind: for ignorance abounds in every business of life, and we have seen men who have been raised to the avocations of the soil from their "swaddling clothes," decrying the virtues of lime as stoutly as though they really knew something about it. We know an individual of this description, who is really so consummate a mass of animal matter, that if by any chance accident, or freak of the moon, an *idea* were to stray into the cells of his brain, an immediate eruption would be the consequence—and this man will attempt to be witty at the expense of those who are so "*silly* as to waste their money in buying lime," for agricultural purposes. But to return to the inquiries of our esteemed correspondent:

1st. "Its adaptation to various soils?"

It is adapted to the improvement of any soil wherein too much water does not abound. For instance to apply it to a wet marshy spot, would be a waste of means, as the lime in such a position could not perform its office, as it would become a mass of disintegrated mortar.

It, however, improves *clays*, by separating the adhesive particles of which they are composed, thus rendering the entire body more friable and easier of being penetrated by the roots of plants and vegetables. If there be, as there frequently is, a superabundance of acid in the soil to which it may be applied, it neutralizes that acid, and renders the earth more healthful to vegetation. The weed known as the sheep sorrel, whose presence is the certain indication of too much acid in the soil, will disappear upon the application of lime, and give place to a more wholesome growth of plants. Upon *sandy soils*, lime exerts a most happy effect, by imparting to them that principle of tenacity, so essential to the power of retaining manures. In a word it may be said that lime suits all soils, except those that are continually wet.

2d. "The proper time and mode of applying?"

These must be determined by circumstances. If the soil be what is called new ground, we would say, the lime should be spread on the surface, ploughed in during the fall, and on the opening of the spring the fields should be ploughed again, in order that the lime may be brought to the surface.

If it be a *clover lay* or a *grass sward*, intended for wheat, we would say, spread the lime and plough it in a few days before seeding.

If a *sod*, intended for corn, we would say—spread the lime and plough it in during the fall, and replough in the spring, just before corn-planting time.

Lime is strikingly beneficial to all lands, except those we have noted; but the greatest degree of benefit is perceivable where it is brought to act upon large bodies of woody and vegetable matter. The received opinion now is, that it is not of itself a manure, but the cause of converting other substances into food for plants. Whether this opinion be correct it is not our purpose to inquire, as we deem it would be an unprofitable expenditure of time. We all know, however, that *lime* has been found in almost every vegetable body that has been submitted to analyzation, with a view of ascertaining the fact; and chemists have proved that lime is soluble in 600 times its weight of water. If we take these two facts in connexion, they would seem to argue that besides performing the simple office of stimulating dead vegetable matter into a state of profitable digestion—into a pabulum capable of being eaten by living plants, that it is itself a *condiment* upon which these plants themselves delight to feed.

3d. "The quantity per acre, whether quick or slacked lime, on grass or ploughed lands?"

With regard to the quantity per acre, a great diversity of opinion exists, and *practice* is as variant as *theory* upon this head.

In England where liming has been carried on to a much greater extent than in almost any other country, there appears to be no settled rule of apportionment, each landholder consulting his own notions of propriety as to the quantity to be applied, and these varying from 150 to 600 bushels per acre. It is affirmed by European writers of approved merit, that strong loams and clays require more lime than light sands. Our own opinion is, that it is not so much the *texture* of the land, as the quantity of vegetable and fibrous matter it may contain.

In France, where the use of lime is justly popular, they are more sparing in their doses, and one of the most intelligent agricultural chemists who have ever written upon the subject, M. Puvis, maintains with great power of reasoning, that as lime is a mere stimulant, only intended to digest other matters into nutritive substances, that *small doses* are the best: he hints that 25 bushels is enough to be applied at any one time: that more good, with the same means, can be effected by periodical applications of small quantities of lime, than by putting on large quantities at a time. The whole scope of this eminent gentleman's reasoning goes to show, 1. That lime is a mere stimulant, a promoter of digestion; and 2. That after it has converted the matter in the soil into *food*, that it remains dormant until other crude substances are brought into contact with it, and 3. That therefore all heavy applications of lime are unnecessary and wasteful.

In this country there is also a difference of opinion as to the proper quantity. Some use from 150 to 300 bushels the acre, while others think that from 60 to 100 is enough. For ourselves we certainly would never exceed 100 bushels to the acre, and would not apply that except the soil was new and full of vegetable matter—a clover lay or a heavy grass sward. In most cases and especially of light soils, we think 50 bushels to the acre quite enough at a time.

We do not know that we should apply it to ploughed land whereon there was no vegetable coating, unless we supplied that deficiency by a full dressing of long manures.

We are not certain that there is much difference in the good ultimately resulting, whether the lime applied be *slacked* or *quick-lime*, except so far as qantity may be concerned—and it should be borne in mind, that the quantities named in this paper, have relation to unslacked lime. If quicklime be applied before it can be of service, it may be slacked, hence the justice of our position.

One important thing to be considered is, that as lime from its great specific gravity, has a tendency to sink, it is important to keep it as near the surface as possible; it cannot therefore, be ploughed in too shallow.

[We cannot agree with the editor of the Baltimore Farmer in his recommendation to keep the lime near the surface. It is, we believe, fully proved by experience, that lime on the surface, is inoperative; and it seems probable that it cannot sink so deep that the root fibres will not follow it. Plough deep, manure deep—for where do plants seek their principal nourishment—on the surface of the soil, or in its depths?—*Yankee Farmer.*]

From the Genesee Farmer.

Italian Spring Wheat.

We have great pleasure in laying before the readers of the Farmer, by permission of the writer, the following statements respecting the kind, quality, and introduction of this valuable grain, from the pen of Mr. Hathaway of Rome, Oneida county, the gentleman who has been the means of introducing it into successful culture in this country. The importance of Spring wheat is yearly becoming more apparent; and the necessity of making a proper choice among the many varieties known, has become imperious upon our farmers. English agriculturists describe the following kinds, all of which are supposed to have originated in the south of Europe; and by some botanical writers are considered as only a variety of winter wheat, the difference being affected by climate and cultivation. First, red, Spring wheat, white ears, beardless;—second, red ear and grain, beard-

less;—third, ear or spike wheat, grain white, beardless;—fourth, Siberian Spring wheat, introduced into Oneida Co. by Dr. Goodsell, bearded, and generally considered inferior in quality to the Italian, but a good grain for yield;—fifth, Egyptian wheat; in Europe treated and spoke of as a winter wheat; here sown as a spring wheat; but we have known many farmers who preferred sowing their spring wheat immediately before the freezing of the ground, in the fall;—sixth, Italian wheat, the kind spoken of in the communication of Mr. Hathaway, and apparently the most valuable of the varieties yet introduced among us. There is in the last number of the Cultivator a paper from Mr. Speyerer of Pennsylvania, and the qualities and culture of another variety of spring grain called in Germany, where it is extensively grown, spelt wheat. Spelt grows with a firm short stalk, will grow on most soils, and makes, when properly prepared, good flour: but as the berry much resembles barley, and cannot be divested of its adhesive husks by threshing, it requires the operation of a mill similar to those used for hulling rice or barley, before it can be manufactured into flour.

The extracts below are from a letter of Mr. Hathaway to a friend, who wishing to procure a quantity of the wheat, addressed Mr. H. on the subject; requesting information as to the manner of its introduction, kind of soil most favorable, mode of culture, &c. &c. Mr. Hathaway says—"The Italian spring wheat which has been disseminated through my means is an excellent grain, and a very sure crop. It yields largely, and has the wonderful property of doing well on poor worn out land, though of course the crop will be heavier on a more favorable soil; the fact is well ascertained here, that land so light and worn down, that it will not produce a crop of oats will bring a fair crop of spring wheat.

"The original imported wheat weighed full 63 lbs. to the bushel; and now that the fifth crop has come in, it weighs 62 lbs. The flour is fine, and the yield good; the miller speaks highly of its qualities; and the flour makes good light sweet bread, rather more moist perhaps than that from winter wheat. The Italian is a bearded wheat, white chaff, bright yellow straw, the berry variable in color, generally of a reddish yellow.

"The proper time for sowing is in April, if the ground can be well fitted; this season has been peculiar, and late sown wheat, has succeeded best with us, and in some instances ripened soonest. It seldom is infected with smut, and if limed, never. From one and one-fourth, to one and a half bushels of seed are sown to the acre, rich land requiring the most.

"This wheat appears to be a cosmopolite," as it grows well, and does well on almost every variety of soil, from a stiff clay to a sandy plain. In this county we have very little *good* wheat land, and I have not seen it growing on any that would be pronounced such by a western farmer. It usually ripens by the 14th of August, and yields from fifteen to thirty-five bushels per acre. The straw this year from its rapid growth is less firm than usual, and is taller; the consequence is that it has lodged more than in any former year.

"I came in possession of the original wheat by accident. An Italian gentleman of Florence married against his father's will, was disinherited, and emigrated to America, bringing among a quantity of other seeds, a tierce of this wheat, intending to turn farmer. The wheat did not arrive seasonable for spring sowing in this place, and was left in a store house near the canal. The gentleman contracted for a farm in the town of *Florence* in this county (induced by the *name* probably) he was no farmer and made bad calculations, and worse experiments, and failed in every thing; soon became reduced, and was about to eat his imported wheat for which I had advanced him money to pay the transit and charges. I happened to see it, and was struck with its excellence, told him it must not be so disposed of, procured him other wheat, and took it at its cost in Italy, $2 50 per bushel. I succeeded in getting it into the hands of some of our farmers, though without much confidence on their part. But the result was most gratifying—the wheat actually producing about double the quantity usually grown on an acre, and selling at more than double the price of common spring wheat. From this it has all arisen."

A small sample of the wheat which accompanied the letter, by its appearance fully justifies the account given of its quality; being of a plumper berry than is usual in spring wheat, thinner skinned, and kernels being more easily reduced to flour. The demand for the wheat has been great, and prices high, but it has become so extensively cultivated in that vicinity that it can be obtained for seed in any desirable quantity, and in all probability at somewhat reduced prices. The remark of Mr. Hathaway that in its adaptation to soil, the Italian wheat might be considered cosmopolite, or every where at home, would be applicable to it in reference to climate, as well as soils. It has been found to succeed admirably in Canada; where the culture of spring wheat promises entirely to supersede that of winter grain; and we have before us the Staunton Virginia Spectator of August 3d, which states that the Hon. Mr. Breckenridge last winter procured five or six bushels from Mr. Hathaway, and

last spring distributed it among the farmers of that neighborhood. The yield has been good, varying from twenty to twenty-five bushels per acre, thus establishing the fact that it may be successfully grown from the Canadas to Virginia. The editor remarks—"That he thinks it is not liable to rust, as he had fields of fall wheat smartly stricken with rust both sides of his patch of spring wheat while that was totally uninjured." We may here remark that in those sections of this state where the winter wheat has suffered most from rust, the spring wheat has, except in a few partial instances, wholly escaped, the straw being unusually bright and fine.

We are glad to see the attention of farmers directed to this important grain, not because we suppose it can ever supersede the culture of winter wheat in this state, for it clearly ought not to; but because there are many parts of the country where winter wheat is so uncertain a crop, owing to the culture of the soil, and the roots freezing out in the winter, that it has been nearly abandoned, and here spring wheat must be one of the most valuable of crops to the farmer. Every farmer should sow a few acres, as it is increasing his chances of remuneration for labor performed on the farm, and lessening the chances of an ultimate failure of that great "staff of life," good bread.

We are requested to say, that orders for the wheat described above, may be directed to Mr. John L. Peirce, Bulls Head, North Third street Philadelphia. Price $10 per barrel.

Fruit and Fruit Trees.

NO. III.

SEED.

Select proper seed from healthy trees, sound, ripe and fair fruit. Let the seed be put into sand as they are collected, and put into a cellar, or other cool, damp place, until the proper time to plant them. If the seeds are kept in a warm and dry place, they seldom vegetate after it, and when they do, are generally of a sickly growth, and seldom make large and vigorous trees.

THE SEED BED.

The seed bed should be planted in the fall, before the ground is frozen, or as early in the spring as the ground is in a state to be ploughed or spaded. Having selected your seed, prepare the ground to receive it; this should be of good soil, not subject to standing water. Let it be spaded some time previous to planting. Plant the seed in rows, fifteen to eighteen inches apart, from one to two inches deep, according to the size of the seed and lightness of the soil. Apples, pears and the like, eight or ten, and stone fruit three or four in a foot, in the rows. Cover them up and press the ground moderately over them.

Stone fruit should be cracked a little if planted in the spring, which need not be done if planted in the fall. During the ensuing season, and every succeeding season, until the trees are removed, hoe out the weeds, loosen the ground, and then thin out the seedling plants, (leaving only the most vigorous) to from eight to ten inches apart. Water them occasionally in a drought.

THE NURSERY.

After one season's growth either early in October, or immediately after the frost is out in the spring, trees that have grown about a quarter of an inch or more in diameter and formed perfect roots may be taken up and placed in nursery rows. Apple and other trees of slow growth which have not attained that size, nor perfected their roots, should remain another season. The nursery into which the young trees are now to be transplanted, should be in good soil, open to the sun and air. After being ploughed or spaded, and levelled by raking or harrowing, dig trenches lengthwise, from 2½ to 3 feet apart; then take up the trees from the bed, prune the roots and top with care, thinning out the branches and roots, cutting off the perpendicular or tap roots, and all irregular roots and branches, leaving only such roots as are in or near a horizontal position. Every tree that does not contain a sufficient number of well placed roots should be thrown away. Open trenches six or eight inches deep, and wide enough to admit the roots freely. Dip the roots in water, which will make the earth adhere to them, and place the trees in the trenches from a foot to eighteen inches apart; draw the ground upon the roots, raise the tree a little so that the end of the roots incline a little downwards; then gradually fill up the trench, at the same time pressing and packing the ground moderately around the roots. In dry weather, water the trees twice or three times a week with rain water, or water warmed in the sun, about a pint to each tree, until they have thoroughly taken root. Plough between the rows and prune them every spring, keeping them clear of weeds during the season. Trees planted from the seed bed which have not been root grafted, will be fit to bud in the budding season of the summer and fall following, or to be whip grafted in the following spring. Those who prefer root grafting are referred to the article on root grafting.

Peach trees and the like, will be fit for transplanting in two or three years, and apples plums, &c. in from three to five years.

They will then have attained about six feet in height and a proportionable thickness, and will make large, healthy, fruitful, and durable trees.

LAYERS AND CUTTINGS.

Many kinds of shrubs and vines may be propagated by cuttings or slips, and most if not all sorts, may be propagated by layers, and in either case the work is to be done early in the fall, shortly after the leaves are shed, or in the spring, as soon as the ground will admit of it.

CUTTINGS.

Cuttings should be taken from shoots of the preceding year's growth, from bearing stocks, of sound and perfect growth, close jointed, and neither rank and pithy, nor small and imperfect, and planted six or eight inches deep. Slips from shrubs, such as gooseberries and currants, may be from twelve to eighteen inches long; and for the grape, woodbine, and other vines, from sixteen to twenty inches long. Plant shrub cuttings in an upright or perpendicular position. On the other hand, the grape and other vines must be planted sloping, and nearly horizontal, with the ends turned up in such a manner as to raise two or three buds on the cutting above the surface of the ground where planted. Before planting, the ground should be loosened for some distance round, and the weeds kept down afterwards. Cuttings may be placed in a nursery a foot apart every way, and transplanted after one or two season's growth, or planted at first where they are to remain. Grape cuttings should be taken when pruning vines in the fall, buried during winter, and planted in the spring.

LAYERS.

All sorts of shrubs and vines which admit of being propagated by cuttings, will succeed equally as well and some better, by layers, and many kinds may be propagated by layers which cannot by cuttings. Layers may be prepared in various ways. My object is to point out only the most plain and simple method, best adapted to common use, and for all ordinary purposes. Take for layers such young suckers or shoots as can be bent down to the ground without separation from the shoot or main stock; dig up and mix the earth along side the shrub or tree from which the layer is to be selected; make a hole from four to six inches deep; prepare a peg or stick from six to eight inches long, sharp at one end, and a hook at the other; cut out from the shoot intended for a layer the buds as directed for cuttings, when it is intended to raise a single stem, bring down the shoot and fasten it with the peg in the hole about twelve or fifteen inches from the end, then cover it over; raise the end of the layer so as to stand perpendicular from the ground, and press the earth around it. In one year the layer will have formed a root of its own, and may be separated from the main stock, the roots and branches pruned and then planted permanently.

GOOSEBERRIES AND CURRANTS.

Currants and gooseberries, and particularly the first, are usually suffered to grow in bunches composed of side shoots and suckers, which absorb all the moisture and substance of the earth, so that no herb or vegetable will thrive within a space of five or six feet from them; they increase until they choke each other, and become a heap of rubbish; the fruit is small, insipid, and unhealthy. They can, with a little attention be raised with a single stem, the fruit then grows more abundant, larger, and better flavored, which is effected by merely cutting out every bud with a chip of the wood from all that part of the cutting which, when planted, will be at or below the surface of the ground.

PLANTING AN ORCHARD.

In planting trees in an orchard or garden, where they are to remain, the same rules should be observed as in transplanting them from the seed bed to the nursery, in pruning, planting, watering and previously mellowing the soil; they should be planted early in October, or as soon as possible in the spring, and the earth, unless it is ploughed, should be spaded four or five feet in diameter for a tree. They should be well secured with firm stakes, and tied up with whisps of straw or loose bandages of any kind, to secure them from being shook or loosened in the ground. The trees should be planted a sufficient distance apart so as to admit the sun and a free circulation of air when full grown: apple and pear trees at least 40 feet, cherry and plumb 30 feet, peach, appricot and nectarine 25 feet. Tilling by raising a succession of crops of grain and suitable manuring, particularly around the trees and as far as the roots extend, will promote a vigorous and rapid growth; in a few years they will attain considerable size and bear fruit in proportion.

SOIL AND SITUATION.

Low, wet or mashy ground is not suitable; it should be upland, or so much so as not to be exposed to standing water; should be open to sun and air, and tolerably rich.

That soil and situation which will bear good crops of winter grain, are well calculated for the cultivation of fruit trees, shrubs, or vines. Occasional ploughing, digging, or in other way mixing or mellowing the ground, keeping down underbrush and weeds, and manuring are beneficial, and will at all times

add to the health, vigor and fruitfulness of trees and vines.

TRAINING AND PRUNING.

Trees, when young, both forest and fruit, may be trained to any shape, from that of a lofty towering top, by pruning away the large limbs, except the leading upright one, to that of a low, spreading top, by cutting off the leading upright limbs. Pear and cherry trees do well with a high top; other kinds make the best bearers with round tops; and no tree, except it be intended as a wall or espalier, should be suffered to form a top less than five or six feet from the ground: to this end all limbs and branches should to that height, be gradually cut away.

Pruning should not be neglected, in divesting trees of suckers from the root, or side shoots, when they are not necessary to fill a vacancy; and generally, in promoting a free circulation of air, and in preventing limbs and branches or vines from intersecting or crowding each other, a medium should be observed, as pruning *too much* is injurious.

The superabundance of sap will cause side shoots, suckers, and eventually decay. The limb or branch intended to be removed should be cut away clear and smooth, without leaving stumps or snags, and even with the trunk or main limb from which they are taken. Large wounds, or those of a moderate size, exposed to wet should be covered over with tar, paint or composition. If this is neglected, or stumps or snags of the branches cut away are suffered to remain, the stump or exposed part will rot in the tree, render it hollow, and in a few years destroy it. Many orchards have rotted, and are now rotting down from this cause.

DISEASES.

To prevent or cure diseases in vegetation, as well as animal life, the best antidotes and principal remedies are to *remove the causes which produce them.* To this end destroy caterpillars, all noxious worms and insects, prune off all unsound and affected parts. If this cannot be done without destroying its usefulness, cut it down and replace it with a young, healthy, vigorous tree. Swine rooting under trees, and birds frequenting the tops, building nests unmolested, will, in a great measure, if not wholly, destroy insects and vermin.

When a tree is bark bound, covered with rough bark and moss, these must be scraped off; and being washed with soap suds or covered with a coat of lime wash, will be beneficial; prune the tree, removing side shoots and suckers from the root, and stir and manure the ground, for the most part, at least as far as the principal roots extend. The soil being sod bound, or barren, or covered with underbrush, or all together are the causes of the difficulty; these being remedied, the tree will again thrive.

It is a mistaken opinion that the disease which destroys peach trees, &c. caused by grubs, can neither be prevented nor cured; either of which can be effected, *if properly and thoroughly attended to.* It is caused by an insect in pricking the bark of the tree near the root, and depositing the seed which produces the grub, between the first of July and frosts in the fall. To prevent this, about a foot of the trunk of the tree next the root should be brushed over with a coat of some sticky, nauseous or impenetrable substance, and this repeated as often as the substance wastes away, is washed off by rains, or crumbles away during the time specified above, which may be tar, train oil, or whitewash, and a little ashes or lime kept on the ground around against the tree. When trees are affected either in the fall or spring, dig and remove the earth around the trunk to expose and give free access to every part affected; remove the gum, search thoroughly for the holes in the bark by which the grubs entered, prick into the bark with a sharp pointed knife: more effectually to find and trace the grubs and their holes, cut away the bark over the holes so as to lay them bare their *whole extent, length and breadth*, smooth the edges of the bark, scrape off all the gum and filth, which remove, together with all the grubs found, wash the holes and parts cut and scraped with ley or soap suds, or rub a little dry ashes over them, and close up the space dug with fresh soil; examine the tree occasionally, and more particularly every spring and fall; repeat the operation to a greater or less extent, when necessary. By this means the grub will be subdued and exterminated, and the trees flourish.

For the Farmers' Cabinet.

Lime, Carbonate of Lime,—Ground Limestone.

On the subject of using ground limestone, instead of lime as a manure, as recommended by Wm. Partridge, and replied to by "Observer," I will remark, that although lime does return to a carbonated hydrate, the same condition it was in before burning, yet between that and ground limestone, there is a material difference; such lime will render land barren, when applied in quantities much less than we often see washed upon the adjoining fields from roads made of and repaired with limestone, producing no effect sensibly different from the wash from the same road where made with other stone.

This difference probably results from car-

bonate of lime, (at least in a state of ground limestone,) being so nearly insoluble in water as to produce no effect on vegetables growing in soil containing it.

Various facts, in connection with reflection on the combinations that must take place when lime is incorporated with the soil, furnish strong ground for concluding that it is only in a state of super-carbonate that the great beneficial action of lime is produced.

We cannot, by grinding, destroy the attraction of cohesion in limestone; there will be two or more atoms adhering. While this is the case it never will be converted into a super-carbonate. Destroy the attraction of cohesion, as the result shows is done by burning and slacking, and it will ultimately be converted into super-carbonate, when incorporated with the soil; is then soluble in water, and acts beneficially or injuriously, as the quantity is in accordance with the wants of the plant, or in excess, as other manures do.

I have been in the practice of using lime for 25 years; there is little of the land I occupy that has not had 200, and some 300 bushels per acre, applied in that time. In my first applications, it was slacked, spread, and incorporated with the soil as soon as practicable from the kiln. But for more than 20 years I have spread but little that has not lain from 3 to 12 or more months, and when spread avoided all means that would incorporate it with the soil, that necessity did not urge for the accomplishment of other objects. This change was the fruit of a doubt of the ultimate utility of using lime to hasten the decomposition of vegetable matter contained in soil under regular cultivation,* and that this questionable advantage was all I conceived I had to place against the known and certain result that by so applying it, it would be converted into carbonate at the expense of a material contained in the soil that then was, or in future would become capable of supporting a vegetable, and that so far as it could be converted into carbonate before mixed with the soil, was clear gain; and I regard my experience as having fully sustained the conclusion. Whether the experience of others has or has not satisfied them which is the preferable mode of using it, they must admit that it is a question of great practical importance, as it would require the greater part of the barn yard manure made on any farm of 100 acres to furnish the carbonic acid that would saturate 800 bushels, 80 pounds to the bushel, of pure magnesian lime, containing 8 per cent. magnesia; and all that is not saturated before incorporation will become so at the expense of a material in the soil, that the farmer must depend on his barn yard for the means of restoring, except applied to an acid soil, and so far as the neutralising of acid is taken into account, it is past controversy, the effect will be the same whether mild or quick lime be used.

Delaware county, 10th month, 27th, 1837.

* This doubt was the result of a conclusion produced by careful observation of natural phenomena, that any substance that has once formed a part of a living fibre, was by the natural decomposition of that fibre placed in a condition more readily to re-enter into a new race of living fibre, than the same substance obtained from the mineral kingdom, or by the destructive analysis of vegetables, and that lime did not effect the natural decomposition, but destructive analysis, and as far as it carried it absorbed the product.

For the Farmers' Cabinet.

Remarks on Splitting Timber and Constructing Fences.

I send for publication the description of a process for splitting timber, which may be new to *some* who read the Cabinet, and in some cases such as dividing large Hemlock logs and others of a similar character *may be useful.*

A cylindrical hole, (say one inch in diameter,) is made in the object to be split, extending to or beyond the centre of it, and a charge of gunpowder in quantity according to the required force, is deposited in the bottom of the hole, and a screw bolt rather more than one inch diameter, with a hole about one-eighth of an inch diameter through the centre from one end to the other, is turned into the hole by means of a wrench acting on a square at the upper end; the hole in the centre is then filled with powder, which serves to conduct fire to the charge at the lower end. When the timber is split the bolt adheres to one of the parts.

In this way timber can be advantageously converted into rails, where it cannot by ordinary means. All timber which is clear of knots, and splits easily, and which will continue sound during one rotation of crops, (say ten years) is suitable for rails to make an angular (or Virginia) fence, *because* the expense of converting the same into rails and afterwards reducing it in size for fuel will be no more than reducing the same quantity to a similar size for fuel at first.

Such rails as cannot reasonably be expected to last during this period, should be excluded from fences intended to remain stationary thus long, and be reserved for fences of a more temporary character or converted into stakes and fuel.

Fences composed of strong materials,—and made of a uniform height are the most economical, *because* the cost of making and keeping in repair for such stated period is less than upon any other plan; and animals are not taught to leap over them, as when they are weak and of different heights,

Animals which cannot be guarded by a fence of ordinary height and strength, should be kept in the stable or other safe enclosure, lest they teach others bad habits.

All fences of this description should be moved, (or new set) at each rotation, for the double purpose of giving the rails a *new bearing* one upon another, in order to preserve them as long as possible; and also for the purpose of bringing the ground formerly occupied by the fence into a rotation of crops to prevent *foulness or to destroy such noxious plants as may have started during the preceding rotation.*

Such fences put upon ground well set with grass, are not so liable to be surrounded by *noxious plants, or foulness*, as when placed upon land recently ploughed. P.

21st of October, 1837.

Curing Pork.

Mr. Editor,—In the New York Farmer I noticed a recipe for making "Knickerbocker pickle," for beef or pork. I will give mine, which I have used twenty-six years with uniform success, and I will tell you how and where I got it. In August 1805, I lodged from Saturday to Monday with an innkeeper in Cherry Valley, N. J., (who was also a farmer.) On the table, for Sunday's dinner, there was a fine piece of pickled pork, boiled the day before; I tasted it, and thought it the most delicious I ever ate. I requested "mine host" to give me his recipe for curing pork. He replied he would do so with pleasure, and proceeded as follows:—

"As soon as my hogs are dressed and cool enough to be cut, I pack the side pieces in a barrel or cask, with plenty of salt on all sides of each piece, and when my cask is full I immediately roll it to my pump, and I pump in water until I can see the water cease to sink in the vessel, or to moisten the salt on the top of the cask. I then lay a flat stone, as large as the vessel, so as to keep the pork always under the salt or pickle. I put it in my cellar, covered so as to exclude the flies, and there it remains until a piece is wanted. Care must be taken to keep the meat under the pickle, otherwise it will rust."

Here is the whole secret of making good pickled pork for family use. I have used this method for the time above mentioned, and I want no better, easier, or economical plan. It has often happened that when I wanted to put down new pork there remained some old at the bottom of the cask; in that case, I poured off the pickle, took out the undissolved salt, packed the fresh pork on the top of the old, using the salt which had been in the cask, with the addition of fresh if necessary, and then poured on the old pickle or water. In this way I have had pork for three or four years in the bottom of my pork barrel, and when used it was as free from rancidity as it was three weeks after it was put down. Indeed, I seldom empty my pork barrel except when it wants hooping. I believe that boiling pickle is useless, if not injurious; pork ought not if it can be prevented, be frozen before it is put down.

C.

Princeton, N. J.

Keeping Farm Accounts.

Let any farmer make the experiment, and he will find it as interesting as it is useful, and both interesting and useful to know from year to year the actual produce of his farm. Let every thing, therefore, which can be measured and weighed, be measured and weighed: and let that which cannot be brought to an exact standard, be estimated as if he himself were about to sell or purchase it. Let him likewise, as near as possible, measure the ground which he plants, the quantity of seed which he uses, and the manure which he applies. The labor of doing this is nothing compared with the satisfaction of having done it, and the benefits which must arise from it. Conjecture in these cases, is perfectly wild and uncertain, varying often with different individuals almost a hundred per cent. Exactness enable a man to form conclusions, which may most essentially, and in innumerable ways avail to his advantage. It is that alone which can give any value to his experience; it is that which will make his experience the sure basis of improvement; it will put it in his power to give safe counsels to his friends, and it is the only ground on which he can securely place confidence to himself.

Ready Mode of Reducing Leaves to Manure.

I am very successful in reducing my leaves to manure. I collect an immense quantity during the winter, and carry them all to the yard where the cows are milked, and have their sheds. Their droppings reduce them quickly; but in order to make excellent manure of them within the season, I cause a light layer of earth to be scattered over them from time to time, as they rise. In February, I turn the whole over, and am sure to have the entire yard covered three feet deep with choice and valuable vegetable mould, fit for use at any time after June, particularly if the season be tolerably wet.

J. M. S.

Always be doing something; never seem to have nothing to do.

Work for November.

Those who neglected to dress their asparagus beds last month, should be careful that it is done early in this. For this purpose, let the old stalks be removed and all green weeds, and a layer of horse manure or litter from the stable spread over the bed from four to eight inches deep. By so doing, the roots will shoot much earlier and stronger in the spring, and are not so liable to be injured during the winter, as when the bed is left without dressing. Sea-kale should also be covered during this month. When it is intended for use in the spring, a small box should be inverted over each plant, and then the bed covered as for asparagus. In the spring the box should be allowed to remain as long as you wish to continue cutting the kale, by which the young shoots will be blanched and more tender, than when grown in the light. All edible roots should now be removed to the cellar, and early peas may be planted, also radishes. Plant out fruit and ornamental trees and shrubs. Cover tender flowering plants and roots with tan bark, horse manure, or litter from the stables. A fine time, this month, to collect compost for spring use. Plough much that your spring work may be in advance. Prepare wood for winter, and see that your houses are in repair, as a bad door will cost a load of wood before spring. See to ditches and drains and that water is not allowed to stand upon your grass lands.—*Goodsell.*

In many situations it will be excellent management to rake up all the leaves of trees, and the mould which has been produced by their decay, which can be procured at a reasonable expense, and cart and spread them in the barn-yard as a layer to absorb the liquid manure from your cattle. Likewise it would be well to place quantities of them under cover, in situations where you can easily obtain them in winter to use as litter to your stables, &c. They do not rot easily, but they serve the purpose of little sponges to imbibe and retain liquid manure, and by their use you may supply your crops with much food for plants which would otherwise be lost. Attend with diligence and punctuality to the wants of the four-footed tenants of your barn, hog-sty, &c. Do not undertake to winter more stock than you have abundant means of providing for. When young animals are pinched for food at an early period of their growth, they never thrive so well afterwards, nor make so good stock. See that you have good stalls, stables, &c. cow-houses, a proper implement for cutting hay and straw, an apparatus for cooking food for cattle and swine, &c. You may also carry out and spread compost, soot, ashes, &c. on such of your mowing grounds as stand in great need of manure. Though some say that the best time for top-dressing grass land is immediately after haying, any time will do when the ground is free from snow, and the grass not so high as to be injured by cattle's treading on it.

Agricultural Society Notice.

In pursuance of a resolution of the directors of the Agricultural Society of New Castle county, notice is hereby given to persons to whom premiums were awarded by the Society, in 1836, and who have not called for said premiums, that they shall be considered as relinquished for the benefit of the society if not demanded within *thirty days* after the publication of this notice. The following is a list of the premiums referred to:

Philip Reybold, for the best		Bull,	$10
Saml. Canby	do	Cow	6
do	do	Heifer	5
James Canby	do	Heifer calf	3
Jno. Andrews	do	Bull calf	6
Wm. Reybold	do	Fatted calf	5
Jesse Gregg	do	Ram	5
do	do	Pen of Ewes	5
do	do	Oxen	7
Saml. Canby	do	Stallion	15
D. W. Gemmill	do	Mare	5
Dr. J.W. Thomas	do	Boar	5
John Platt	do	Butter	2
Ab. Alderdice	do	Wheat Fan	3
Eliza N. Ferris	do	Silk	5

Notice is also given that such of the premiums on the list for 1837, as are not called for within sixty days after the publication of this notice shall be considered as relinquished for the benefit of the Society.

Philip Reybold	for a Bull	$10
Saml. Canby	Cow	6
Geo. Platt	Heifer	5
Saml. Canby	Heifer Calf	3
Benj. Webb	Bull Calf	5
S. Canby	Oxen	7
Th. Massey. Jr.	Stallion	15
Henry Dupont	Colt	5
Th. Massey, Jr.	Mare	10
P. Reybold	Ram	5
do	Pen of Ewes	5
S. Canby	Boar	5
Th. Massey, Jr.	Sow	5
John Thompson	Butter	4
Saml. Canby	Cabages	2
John Andrews	Cauliflowers	2
Dr. Wm. Gibbons	Pears	2
P. Reybold	Peaches	2
Lydia Baldwin	Silk, a silver cup, value $30.	

The above premiums will be paid on application to JAMES CANBY, Treasurer.

By order of the Directors,

H. GIBBONS, Sec'ry.

10th mo. 24th, 1837.

Proceedings of the Agricultural Society of Kent County, Del.

Pursuant to adjournment, the Agricultural Society of Kent county, met at Dover, on Tuesday, the 3rd instant.

On motion of John M. Clayton, Esq., Gov. Cornelius P. Comegys was elected the President of the Society.

On his motion also,

Resolved, That a committee to consist of one member from each hundred in the county, be appointed by the chair, to nominate the officers of the Society.

Whereupon, the chair appointed Jacob Raymond from Duck Creek Hundred, Elias Naudain from Little Creek Hundred, John M. Clayton from Dover Hundred, Robert W. Reynolds from Murderkill Hundred, Daniel Taylor from Mispillion Hundred, and Justus Lowery from Milford Hundred, who retired to effect the object of their appointment.

The committee previously appoined, reported as follows:

The committee on fruits, reported the following articles as the best produced:

Isabella grape, No. 1, Mrs. Frances L. Schee.

Catawba do No. 1, do do

Strawberries, No. 1, Thos S. Hillyard.

(Mr. Hillyard produced at the exhibition at least a pint of large ripe strawberries.)

Tomatoes, No. 1, Thomas Stevenson, weight of the largest 1 lb. 6 oz.

Pumpkins, No. 1, John M. Clayton.

Squashes, No. 1, Thomas L. Temple, weight 9½ lbs.

Squashes, No. 2, Charles Kimmey, Sr., 7¼ lbs.

Squashes, No. 3, Mrs. Elizabeth Freeman, 9¾ lbs.

(Squashes arranged according to quality.)

The committee also, by request, examined some beautiful specimens of honey, and reported as follows:

No. 1, to Benjamin Enos.

No. 2, to John McGlary.

ON FLOWERS.

The committee on flowers beg leave to report that they have examined the various specimens produced, and have found them respectively much finer than they had anticipated. In awarding preference they have felt considerable difficulty. A corronation Dahlia with the name of Mr. John Manlove is the finest specimen of this beautiful species they recollect ever to have seen.

Mrs. Harrington, through her husband, Judge Harrington, exhibited a tablet of ten or twelve varieties of the Dahlia, beautiful in the extreme.

With a bouquet, consisting of daily and other roses, with a rich variety of honeysuckle and other rare flowers, cultivated by Miss A. Ridgely, the committee were particularly gratified. The committee also examined a large variety of rich and beautiful flowers, without labels, many of which would deserve particular notice had the committee been apprised of the names to whom they could award the preference. Upon the whole, the committee would remark that as none of the flowers have been raised for the exhibition, they are remarkably fine, and reflect great credit upon the taste of those who presented them.

ON CROPS AND GRAIN.

The committee on Crops and Grain report, That Thomas L. Temple exhibited the best specimen of corn. Jonathan Jenkins showed a very fine specimen of northern flint yellow corn, raised by him this season. There were four stalks of corn produced, raised by Jacob Penington, bearing *eight ears*—the whole the product of *one grain*. There was no account of crops, except that given by Messrs. Sipple and Pennewill of Dover, who reaped from two acres of ground, on the 15th of July last, 68 bushels of spring wheat, weighing per bushel, 60½ lbs. The wheat was sowed on the 15th of March previous.

ON CATTLE.

The committee on Cattle makes the following report.

No. 1. Jacob Raymond's bull calf, 5 months old, weighing 480 lbs. by a full blood, short-horned Durham bull, out of a half blood English Cow.

No. 2. William F. Parker's heifer—one year old, the stock unknown to the committee; raised by hand—weight about 600 pounds.

No. 3. Thomas S. Hillyard's bull—one year old, by a short horned Durham bull, out of a fine country cow, and raised in common with his other cattle—weight about 500 lbs.

ON HORSES.

The committee on Horses reported as follows.

Robert Palmatory exhibited a 3 year old bay horse, sired by the Maryland Eclipse.

John Woodall, one do. sired by Chance Medley. Both of these colts are fine, but your committee think that the latter has the best *form*.

Caleb H. Sipple exhibited a 2 year old sorrel mare colt, sired by Uncle Sam.

George W. Cummins, a 2 year old, horse colt, sired by the Maryland Eclipse.

James G. Waples, a 2 year old sorrel mare colt, sired by Uncle Sam. All of the 2 year old colts are very fine, exhibiting great bone and muscle, but your committee think Mr. Cummins' colt the best for size and general form.

George W. Cummins exhibited a 1 year old sorrel mare colt, sired by Uncle Sam.

Thomas L. Temple, a 1 year old grey horse, by same sire.

Simon Spearman, 1 do bay horse, by Mark Antony.

James Orskins, 1 do. dun mare, sire not known.

The above year old colts were uncommonly

fine, but your committee are of the opinion that Mr. Spearman's colt has the finest form.

Thomas L. Temple exhibited a coalt foaled this spring, sired by Uncle Sam.

Thomas Wallace exhibited one, do. Both are good colts; your committee are of opinion that Mr. Wallace's has the best size and form.

ON VEGETABLES.

The committee on Vegetables report, that they have been much gratified by the variety and excellence of the many samples of vegetables presented for their inspection, among which they would particularize

Very large and well headed cabbages exhibited by Daniel Cowgill and Jacob R. Griffin.

Mangel Wurtzel beets weighing 25 lbs. by Jacob R. Griffin, and also by John M. Clayton, very large.

A specimen of sugar beet, raised by Samuel Verdin, from Landreth's seed--weight 11 lbs.

Blood Beets by Wm. T. Milbourn, Samuel Virden, and Jonathan Jenkins, of which the largest, being Mr. Milbourn's, weighed 12¼ lbs.

A large yellow beet by Simon Spearman, 29 inches and a half in circumference.

A blood radish, by John Kennedy, 26½ inches, circumference.

Two samples of potatoes were presented by Simon Spearman and George W. Cummins, both of the mercer kind and both very fine.

Large turneps were exhibited by Nathan C. Ward and Nathan Farrow. Mr. Ward's turnep weihged 5½ lbs. and was but 41 days from the seed.

John M. Clayton presented the largest egg plant, weighing 4 lbs. 12 oz. Dr. Levin H. Adams and John Manlove also exhibited handsome specimens of this vegetable. The largest of those exhibited by Dr. Adams weighed 4 lbs. 10 oz.

Charles Kimmey exhibited a very fine citron (or rock) melon, as large as the common water melon.

Thomas L. Temple and Mrs. Freeman showed some handsome squashes, and Mr. Temple also obtained the preference for oyster plant.

Stalks of the celery plant over 4 feet long and very large, were presented by Samuel M. Harrington and Henry Todd. On motion of Martin W. Bates, Esq. the names of the members who had joined the Society, at its previous meeting, were read.

Jacob Raymond, Esq. from the committee to nominate officers of the society, reported as follows.

Vice Presidents. Benjamin Coombe, John Cowgill, David Onins, Samuel Thawley, William Masten, and Peter F. Causey. *Corresponding Secretary*, Henry M. Ridgely. *Recording Secretary*, Joseph P. Comegys. *Treasurer*, Caleb H. Sipple. *Directors*, Jacob Raymond, Robert Palmatory, George W. Cummins, Daniel Megear, Elias Naudain, John Frazer, Thomas L. Temple, William Nickerson, John M. Clayton, Jonathan Jenkins, Robert W. Reynolds, Joel Clements, Samuel Virden, Justus Lowery, Peter F. Causey. Robert Sorden, William Mastin, and Martin W. Bates.

On motion of Mr. Bates, the report was adopted.

On motion of Mr. Clayton, the meeting then adjourned for the space of half an hour, to afford time to the board of Directors, to appoint the standing committees of the society, in obedience to the Constitution. At the expiration of the time, the meeting again convened, and the Board of Directors reported to the meeting, their selection from among themselves, of the following persons to compose the said committees, to wit.

Committee on Agriculture.--Benj. Coombe, Peter F. Causey, Robert W. Reynolds, Martin W. Bates, and Jonathan Jenkins.

Committee on Horticulture.—Henry M Ridgley, Jacob Raymond, Thomas L. Temple, Justus Lowery, and Robert Sorden.

Committee on Silk.--John M. Clayton, Geo. W. Cummins, Elias Naudain, Samuel Virden, and John Frazer.

On motion the report was adopted.

On motion of Henry M. Ridgly, Esq., the Treasurer was directed to procure a record, for the purpose of having entered therein the proceedings of the society.

On motion of Simon Spearman, Esq. ordered that the proceedings of this meeting, including the reports of the committees, be published in the newspapers of this state.

On motion of Mr. Bates, Ordered that the names of those persons, who had become members of the society since the first meeting be now read.

Whereupon, it appeared, that the following persons had entered their names, to wit—Simon Spearman, Jabez Jenkins, Cornelius P. Comegys, Dr. William W. Morris, Henry Todd, Henry Cowgell, William Savin, Michael Lowber, John Eaton, Nathan Farrow, Charles Harper, Samuel Verdon, Robert Sorden, Jonathan Jenkins, Joseph Hoffecker Jr., Daniel Lockwood, Hunn Jenkins, Benjamin Coombe, Elias Naudain, John Frazer, Charles Kimmey, Senr. John Cowgill and Joseph Green.

On motion the meeting then adjourned.

SAMUEL THAWLEY, Chairman.

Attest—GEORGE W. CUMMINS, JOSEPH P. COMEGYS, } Secretaries.

Smut in Grain.

We are surprised to learn that smut is still permitted to adulterate and diminish our grain crops, when it is a fact amply and satisfactorily established, that steeping the seed grain twelve hours in brine, and rolling it in fresh slacked lime, before sowing, will prevent the evil. The *paper-brand, dust-brand*, the two species of smut, are parasitic plants, the minute seeds of which attach to the grain, and are propelled through the sap vessels of the plant, to the germs of the young grain. The salt and lime destroy the vitality of these seeds.—*The Cultivator.*

Winter Cattle Feed.

The indifference which is manifested in every direction of our country toward procuring a supply of succulent food for milch cows during winter, is as cruel as it is impolitic. Without such food to be substituted for the herbage of pastures, it is as impossible that cows can be kept in good order as that they can be kept profitably to their milk upon dry food. Say what we may, the cow that keeps well to the pail during winter must be supplied with *such* food as yields succulent matter bountifully; —for without she be so provided, it is utterly impossible that the milk-vessels can *secrete* milk, and for the very obvious reason that they must have something to extract it from. We have often seen a farmer who, with half a dozen cows to the pail, in winter, did not make more butter and cream than supplied his own table, whereas he ought to have been able, in addition to domestic consumption, to have sent at least 20 lbs. per week to market. If this were an isolated case it would not strike us with wonder; but from its almost universal prevalence, it is at once a subject of regret and mortification—regret that the claims of self-interest and humanity are so shamefully neglected—and mortification, that so little regard is paid to a branch of husbandry so intimately connected with human comfort.

With these introductory remarks, let us say what are, in our opinion, the best food for cattle in winter. It is *Mangle Wurtzel*, *Sugar Beet*, *Ruta Baga*, and *Pumpkins*. Each of these may, by proper care, be provided in ample quantities, without materially interfering with the other farming operations. A single acre planted in *Mangel Wurtzel*, or *Sugar Beets*, in rows two feet apart, the plants one foot asunder, supposing that the beets average 3 lbs. a piece, which is a very moderate average, is capable of yielding 1089 bushels, which, at the rate of a bushel a day to *each* cow, would last seven cows from the 1st of December till the 1st of May, and if they get but half a bushel a day each, the product of an acre would keep 14 cows in food during the time named. Beets every one know how to cultivate—to wit, that they are to be planted in good deeply ploughed rich loam, previously well manured; that when the beets come up that they may be thinned, cleaned of weeds, and subsequently receive three hoeings and cleanings. This is not more trouble than ought to be devoted to either the culture of corn or potatoes; but how different is the result of product. Of all the articles named by us as proper for winter food, we would prefer the two varieties of beets; but we think that every judicious farmer will at once see the propriety of providing some of all, as there is nothing which so tends to keep cattle in winter to their appetites, as frequent changes of food; we have frequently seen them reject the same kind of food one day that they had eaten with avidity the previous one, and after an interval of a few days feeding on something else, return with renewed vigor of appetite to that which only a few days before they had loathed.—*Farm. & Gardener.*

For the Farmers' Cabinet.

In the autumn of 1836, the writer, in company with four other gentlemen, made a visit to Mr. George Walker, the justly celebrated agriculturist, near Holmesburg, Pennsylvania. The following lines commemorative of the visit are the offspring of genuine feeling.

How sweet in rural lodge to find
Intelligence and worth combined;
A love for all that nature strews
Through her domain with hand profuse.
But which alas! to vulgar eye
Is ever wrapt in mystery;
With pleasure I shall oft recall
The hour we passed in *welcome hall.**
A city's luxuries were there,
Crown'd with the dairy's bounteous fare;
A taste refined throughout was seen
With woman's most attractive mien.
Our host in rustic† ease reclined
With clear and philosophic mind,
On each new subject of debate
Could every doubt elucidate;
To rural lodge‡ I bade farewell
With feelings guest alone can tell.

H.

From the Paris Bon Sens.

Beet Sugar.

Monsieur de Dombasle had declared the desiccation of the beet in large quantities,—so effected as not to injure it for the subsequent stages of the Sugar manufacture,—to be impracticable. His experiments were met by so many difficulties, that he in the end abandoned them.

We hear that this important problem has just been solved in Germany, by M. Schuzenbach. A factory, which has adopted his process, is already in active operation. The immense advantages of this discovery, will doubtless be appreciated by our manufacturers; and we hope that efforts will be made to acquire a knowledge of the secret, which must bring about a revolution in the business of Beet Sugar.

---

* The dining apartment.
† Applied in its most refined sense.
‡ The name suggested for Mr. Walker's residence.

We learn from the National Gazette that Mr. F. J. SCHUZENBACH, of this city, brother of the inventor of the new process spoken of, will, probably, introduce it shortly into the United States.

From the Augsburgh Gazette, July 9.

GERMANY—*Carlsruhe.*—There are now in the neighbourhood of our city three Beet Sugar Factories, and the beet crop of this year, it is expected, will reach 14,000 quintals. These, according to the French process, would produce 7,000 quintals of brown sugar. But hopes are entertained of a yield of 11,200 quintals in employing the new method of Schuzenbach. A commission appointed for the purpose by government has verified the advantages offered by the process of Schuzenbach.

From Le Monde, a Paris paper.

There is still another symptom of commercial activity reigning in Germany. A company has just been formed in Stuttgard for carrying into operation a new process invented by Mr. Schuzenbach, by means of which it is expected the beet sugar will be sold for the price of 6 to 7*d.* per lb. The capital of the company is fixed at one million of florins, (2,160,000 francs,) and is divided into two thousand shares. On the very first day of its organization, eight hundred and twenty-five shares were subscribed by the richest capitalists and first bankers of Wurtemburg and Baden.

Kentucky Cattle Sale.

The Lexington Gazette has the following table of prices of cattle, sold recently: they were of Mr. David Sutton's stock of blooded cattle.

COWS.	
Cleopatra, aged	$601
Lady Gray, 7 or 8 years old	745
Western Daisy, 4 years old	745
White Rose, 20 months	735
Josephine, 18 months	495
Young Beauty, 14 months	555
BULLS.	
Wellington, 3 years	515
Frederick, 2 years	1310
Favorite, 2 years	530
Hervey, yearling	625
Cyrus, calf	810
Philip, calf	370
Pilot	275
Mary Jane, 2 years	405
Red Daisy, yearling	235
Roxana, yearling	220
Ann Maria, 3 years	275
Queen Mary, 3 years	160
Queen Mary's king calf	120
Lady Wallace, 2 years	175
Red Sides, 2 years	109
Lucy Roan, 2 years	177½
Young Bright Eyes, 2 years	199
Prudence, yearling	130
Lady Mundy, aged	100
White Mary, aged	127½

From the Plymouth (Mass.) Memorial.

Bridgewater Cattle Show.

The Plymouth County Agricultural Society held its anniversary, for the election of officers, *Cattle Show* and Exhibition, at Bridgewater on the 11th inst. Every thing was conducted with the strictest regularity and order, and nothing occurred to interrupt the business and pleasures of the day. The exhibition of almost every description were more numerous and of better quality, than they have heretofore been, and the number of competitors was much increased. The adventurers in the plough-field were greater in number than common, and the match was conducted with great readiness and despatch.

The address by the Hon. Solomon Lincoln, was highly appropriate and interesting, and delivered in an eloquent and impressive manner. The dinner was such as a Farmer's ought to be, the growth and produce of our native soil, plenteous, agreeable and wholesome. Several toasts were announced from the chair, which were highly appropriate, and others of much pith were proposed by individuals at the table.

We are happy that the spirit of Agriculture and the arts so important to the welfare and prosperity of the country, suffers no diminution in this section of the Commonwealth where the Pilgrims first felled the forest, and by cultivation brought the earth to yield its fruits for the benefit of its civilized inhabitants.

The following song was written for the occasion by B. Brown, Esq. of Boston, and sung with good effect at the Cattle Show on Wednesday.

THE PLOUGH.

When Adam with his blooming rib,
By the behest of Heaven,
From Paradise, his native home,
All sorrowing was driven,
The curse primeval, thought so hard,
A blessing was I trow,
That she should nurse her little babes,
While he should guide the PLOUGH.

So, our great ancestor became
A Farmer of the soil,
And millions of his children too
Are sharers in the toil.

We clear and beautify the fields;
We drain the miry slough;
We wield the sickle and the flail,
And guide the sturdy PLOUGH.

Of all the stations here on earth,
The Farmer ranks the first,
Though some may reckon him debas'd
For toiling in the dust.
'Tis Nature's calling he pursues,
As, with a sweaty brow,
He turns the sod all upside down,
And guides the sturdy PLOUGH.

When Spring in all its merriment
O'erspreads the fields with green,
And naught save notes of joy, is heard,
And naught but smiles are seen,
The Farmer turns his tillage lands,
And who's so happy now,
As he, while, whistling to his team,
He guides the shining PLOUGH.

Domestic joy full well he knows,
And, it may hap a care;
For none must think to be exempt
From common lot and share;
His wife, she deems it her concern
To milk the bonny cow,
And cheer her ruddy husband, as
He guides the sturdy PLOUGH.

For love of wealth some get ensnar'd
In speculation's toils,
And others, when disasters come,
Are scrambling for the spoils;
Still does the prudent Farmer pay
To industry his vow,
Nor heeds the struggle nor the strife;
But steady guides the PLOUGH.

Good rule and order he maintains;
He lives in peace with all;
And, to defend his country's rights,
He's ready for the call;
Now, to be ever thus content,
Say, wight, would ye know how?
'Tis but to mind your own affairs,
And steady guide the PLOUGH.

From the Baltimore Farmer and Gardener.

A Good Spirit.

We publish below a highly interesting letter from the Corresponding Secretary of the New Castle County Agricultural Society of Delaware. We rejoice to find from it that a spirit of laudable enterprise has been awakened among the agriculturists of that generous and patriotic state; and we trust it will be impelled forward until it shall have infused itself into the bosom of every man who cherishes veneration for the noble calling of the husbandman.

We cannot close this article without returning our thanks to Dr. *Thompson*, for his acceptable present of a loaf of bread made from *Spring Wheat*, raised by that enterprising and intelligent farmer, Major *Reybold*, and we will say this much for the Delaware loaf, that, with a single exception, we have never eaten of such excellent bread. It was all that bread ought to be, all that good flour and human art could make it.

—

Wilmington, Oct. 6th, 1837.

To the Editor of the Farmer and Gardener:

Sir—Knowing the interest you take in every thing that appertains to the agricultural advancement and prosperity of our country, and how acceptable facts and practical experiments are to the conductors of the "Farmer and Gardener," I take the liberty of sending you, through the politeness of Capt. Frazier, agent of the Wilmington and Susquehanna rail road, a *loaf of bread* made from the Italian spring wheat raised on the farm of my enterprising friend Philip Reybold, esq., of this county, the present season, it being a part of the same bread produced at the agricultural dinner there on the 4th inst. Mr. Reybold, who is known to many of your readers as the president of our agricultural society, and one of the most prominent farmers in Delaware, stated to the members at the late quarterly meeting of the society held at Newark in this state, his experience and confidence in the success of the Italian Spring Wheat so highly spoken of lately to the North, and commented on in different publications. From eight bushels of the seed procured by him from Rome, New York, he had raised he said about one hundred and twenty bushels, and had heard, and believed from its purity, that it would make *good bread*.—Some of our old and respectable farmers present expressed doubts about *spring-wheat*, the same grain they thought had been tried in this state many years ago, and that the flour from it was considered little better than rye flour—that it was dark and the bread heavy. It occurred to us to suggest a trial of the bread made from this wheat, and that a lot of it might be sent to a disinterested committee of two members of the society:—the proposition was immediately acceded to by Mr. Reybold, and the wheat was liberally furnished by him. It was taken to mill by one of the committee, unmixed with any other wheat, ground and bolted in his presence, and baked by his cook in the usual manner. The result of the experiment you will see and judge for yourself. At the agricultural dinner, I need scarcely add, that it gave universal satisfaction to the large and intelligent company present (among whom

were several celebrated millers heretofore rather sceptical, but who were convinced as well as gratified as soon as they *saw* of the bread made from wheat sown on the 17th of last March, when the disastrous state of the winter grain was well ascertained to be general throughout the country.) The good example of Maj. Reybold will be extensively followed in Delaware. A number of us have already ordered a large supply for seeding the ensuing spring. Enclosed I send you some grains just received by me in a letter from Mr. J. Hathaway, Rome, New York, of this year's growth, and Major Reybold's crop is very much like it.—It is very pretty grain —Mr. Hathaway says of it, "that it produces well, and will succeed on worn and meagre land—and although the season has been very wet with them, and the grain not so bright as usual, still it is plump and heavy, and that a neighbor of his has just threshed 35 3-4 bushels of wheat from 7-8 of an acre and 2 bushels sown.

To the wheat growers of Maryland and Virginia, and indeed of our whole middle states, in part of the country, we think this grain is destined to become of vital importance, and that it will succeed in those states as we have ascertained it will do in Delaware, I have not the least doubt. Here its yield has been about 30 bushels to the acre, without manure, and on a tolerable soil only :—whilst the winter wheat in adjoining fields, cultivated in the best manner, and by a good farmer, has not given half that crop, in consequence of the change in our winters, and the ravages of Hessian fly. The loaf I send you is the best essay that can be given on the subject; as it settles and establishes the fact that good flour and *white and light bread* have been *made*, *exhibited*, and *eaten*, for the first time in this state from *spring-wheat*. This test, has made many converts to it with us, and although our farmers should not abandon winter grain altogether, it is a most happy reflection for them to know that they have a second resource in the *Italian Spring Wheat*, should their first crops fail.

To the doubtful and prejudiced farmer, perhaps the argument I have sent you (the bread itself) will scarcely be sufficient to convince him that the experiment will answer. All we need ask of him for the present is, to lay aside his preconceived notions, and give it for a season or two, a fair and honest trial. The improving spirit of the age demands investigation into every reasonable proposition, and if its principles are found to be correct, an intelligent mind will soon adopt them.

I have detained you much longer on this interesting subject than I had intended, but as I have been highly gratified at the result of the experiment myself, you will excuse me for having been thus prolix:—perhaps much *better bread* made from spring wheat is familiar to you—to us it is a noveity. I regret that you will not get it as fresh as it was served at the dinner table, and with the appliant of the fine premium butter exhibited on that occasion. As some of your friends might like to see the heads of this wheat, I send a few plucked from the field before they were ripe and filled—they will convey, however, a good idea of its general character. It grows tall and presents almost the rich appearance of a field of barley. The premium list, and detailed account of our agricultural and horticultural exhibitions, which took place on the 4th inst., are not yet published. I will send them to you for your paper as soon as they are out. I am happy to inform you that the proper agricultural spirit is getting up in Delaware. The New Castle County Society has just held its second annual cattle show—Kent has organized a society, with some of her most prominent citizens at its head, and we doubt not now, that the good example set, will be followed by Sussex, and many of the adjoining counties of the Eastern Shore of Maryland. Asking the aid of your valuable exertions to bring this state of things about, I remain, yours, most respectfully,

JAMES W. THOMSON.

Food for Cows.

M. Chabert, the director of the veterinary school of Alford, England, had a number of cows which yielded twelve gallons of milk every day. In his publication on the subject, he observes that cows fed in the winter on dry substances gives less milk than those which are kept on a green diet, and also that their milk loses much of its quality. He published the following receipt, by the use of which his cows afford him an equal quantity and quality of milk during the winter as during the summer;—Take a bushel of potatoes, break them whilst raw, place them in a barrel standing up, putting in successively a layer of potatoes and a layer of bran, and a small quantity of yest in the middle of the mass, which is to be left thus to ferment during a whole week, and when the vinous taste has pervaded the whole mixture, it is then given to the cows, who eat it greedily.

Wheat.

Those who have not yet got in their wheat, we would remind of two things. *First*—by no means to omit putting their seed in a *soak* made of *brine*, *lime-water*, or *ley*,—and *secondly*—to plough it in some three or four inches deep; while the first will cleanse the grain of all smut and destroy any eggs that may be deposited on its surface, the latter will greatly tend to prevent the frost from spewing the plants up, should the coming winter prove to be one of alterations of freezings and thawings, which are so disastrous to small grain.

ARTICLES.	Philadelphia, Oct. 31.	Baltimore. Oct. 24.	New York, Oct. 31.	Boston, Oct. 25.
Beans, white, per bush	$1 37–1 62½	1 25—0 00	0 14—0 15	1 37—1 75
Beef, mess, new, per bbl	14 00–15 00	13 50–14 20	12 00–13 00	12 50–14 00
Bacon, western, per lb	7½— 10	7— 9	8— 10	.....
Butter, extra, per tub	14— 15	16— 20	20— 22	17— 18
Butter, fresh, per lb. (market,)	18— 25	20— 25	20— 25	25— 28
Hams, per lb	10— 13	13— 13½	12— 14	14— 15
Hog's Lard, per lb	7½— 8½	9— 10	8— 9½	8— 9
Cheese, American, per lb	10— 12	9— 11	9— 11	8— 9
Beeswax, yellow, per lb	26— 27	23— 25	25— 27	26— 32
Beeswax, white,	.....	38— 40	38— 40	38— 40
Bristles, American,	42— 65	25— 65	25— 65	.....
Flax, American,	8½— 9	9— 10	9—	9— 12
Flour, best, per bbl	8 50—9 00	8 00—8 75	8 25—8 37	8 87—9 00
GRAIN—Wheat, per bush. Penna	1 70—1 87	1 80—1 90	1 60—1 80	.....
do. Maryland,	1 60—1 75	1 10—1 40	1 60—1 75	.....
Rye, per bushel,	95—1 00	82— 85	—1 06	1 25—1 33
Corn, do	1 00—1 03	96— 98	1 04—1 06	1 05—1 06
Oats, do	40— 43	33— 34	35— 45	48— 00
Barley, do. Penn	.....	... .	0 00—	0 00—0 00
Peas do	1 00—1 25	00—0 00	— 8	.....
HAY, Timothy, per 100 lbs	0 00—0 00	12 00 pr. ton.	.....	20 00 pr ton.
Meadow Grass,	70— 80	.....	... .	.....
Hemp, American dry rot, ton,	175 00–	6— 7	130 —140	.....
Hops, first sort, 1836, lb	7— 8	— 9	— 10	7— 8
Plaster Paris, per ton,	3 25—0 00	0 00—3 50	2 50—	2 75—0 00
SEEDS—Cloverseed, per bushel,	6 50—7 00	6 00—7 00	.....	15— 16
Flaxseed, rough, do	1 35—1 40	1 37—1 50	....	.....
Timothy,	2 00—0 00	3 25—4 00	.....	2 87—3 00
Tallow, per lb	8½— 10	— 10	— 11	10— 11
WOOL—Saxony, fleece, per lb	00— 00	40— 50	75— 80	50— 55
Merino,	00— 00	35— 40	50— 68	45— 47
1-4 and common,	00— 00	25— 30	40— 50	30— 33

ILLINOIS.

We have just received from the publishers, Messrs. GRIGG & ELLIOTT, No. 9 North Fourth street, Philadelphia, a copy of the second edition of J. M. Peck's "*Gazateer of Illinois, in three parts, containing a general view of the state, a general view of each county, and a particular description of each town, settlement, stream, prairie, bottom, bluff, &c. alphabetically arranged.*" The author has resided for a number of years in the state of Illinois—is a clergyman of great respectability, and we take no little pleasure in recommending this Gazateer as a suitable and necessary companion or guide, to every one about to visit the west. The emigrant may depend upon the correctness of the information afforded him in this volume, which is sold at a price so low, as to place it in the reach of every one. We shall refer to this work again, and make some extracts respecting the soil, climate, productions, &c.

NOTICE.—After our paper was prepared for the press, we received a highly interesting communication from a Gentleman in Maryland, on the subject of curing "pork." It will appear in our next. ☞ We were disappointed in the *quality* of the paper furnished for the last Cabinet. ☞ Continuation of article on Corn in our next.

THE FARMERS' CABINET,

A semi-monthly newspaper, is published by

MOORE & WATERHOUSE, No. 45 NORTH SIXTH STREET, PHILADELPHIA.

[To be had at O. ROGERS' Book Store, No. 67 South Second street, Philadelphia.]

JOHN LIBBY, PITTSBURG, PA.

NEW YORK—Publication-Office at the Book-Store of *Robert Carter*, No. 112 Canal street.

Messrs. *Howell & Kingsbury*, of Elmira, General Agents.

The Cabinet is published on or about the first and fifteenth of each month. Each number will contain 16 octavo pages on good paper and fair type. The subjects will be illustrated by engravings on wood whenever they can be appropriately introduced. TERMS.—*One dollar per year, payable in advance.* The Cabinet, by the decision of the Post Master General, is subject only to *newspaper postage*, that is one cent on each number within the state, and within one hundred miles of the place of publication, out of the state,—one cent and a half on each number to any other part of the United States. ☞ Seven copies for five dollars. All subscribers must commence with the volume No. 1. or with the half volume No. 13.

J. Van Court Printer, corner of Bread and Quarry St. rear of 96 N. Second.